CLAIMS

What is claimed is:

Claim 1. A method for treating a patient suffering from a cancerous disease comprising:

administering to said patient anti-cancer antibodies or fragments thereof produced in accordance with a method for the production of individually customized anti-cancer antibodies which are useful in treating a cancerous disease, said antibodies including a subset of antibodies or fragments thereof characterized as being cytotoxic against cells of a cancerous tissue, said subset being essentially benign to non-cancerous cells;

wherein one or more antibodies or fragments thereof selected from said subset are placed in admixture with a pharmaceutically acceptable adjuvant and are administered in an amount effective to mediate treatment of said cancerous disease;

said one or more antibodies or fragments thereof being selected from the group consisting of a 1LN-8, 4BD-1, a 4BD-3, a 4BD-6, a 4BD-9, a 4BD-13, a 4BD-18, a 4BD-20, a 4BD-25, a 4BD-26, a 4BD-27, a 4BD-28, a 4BD-32, a 4BD-37, a 4BD-50, a 6BD-1, a 6BD-3, a 6BD-5, a 6BD-11, a 6BD-25, a 7BD-7, a 7BD-12-1, a 7BD-12-2, a 7BD-13, a 7BD-14, a 7BD-19, a 7BD-21, a 7BD-24, a 7BD-29, a 7BD-30, a 7BD-31, a 7BDI-17, a 7BDI-58, a 7BDI-60, a 7BDI-62, a 5LAC2, a 5LAC4, a 5LAC20, a 5LAC23, a

H460-1, a H460-4, a H460-5, a H460-10, a H460-14, a H460-16-1, a H460-16-2, a H460-23 and a H460-27 monoclonal antibody or combinations thereof.

Claim 2. The method for treating a patient suffering from a cancerous disease in accordance with claim 1, wherein said one or more antibodies or fragments thereof selected from said subset are humanized.

Claim 3. The method for treating a patient suffering from a cancerous disease in accordance with claim 1 comprising:

conjugating said subset of antibodies or fragments thereof with a member selected from the group consisting of toxins, enzymes, radioactive compounds, and hematogenous cells; and

administering conjugated antibodies or fragments thereof to said patient;

wherein said conjugated antibodies are placed in admixture with a pharmaceutically acceptable adjuvant and are administered in an amount effective to mediate treatment of said cancerous disease.

Claim 4. The method of claim 3, wherein said one or more antibodies or fragments thereof selected from said subset are humanized.

Claim 5. The method for treating a patient suffering from a cancerous disease in accordance with claim 1 wherein:

the cytotoxicity of said antibodies or fragments thereof is mediated through antibody dependent cellular toxicity.

Claim 6. The method for treating a patient suffering from a cancerous disease in accordance with claim 1 wherein:

the cytotoxicity of said antibodies or fragments thereof is mediated through complement dependent cellular toxicity.

Claim 7. The method for treating a patient suffering from a cancerous disease in accordance with claim 1 wherein:

the cytotoxicity of said antibodies or fragments thereof is mediated through catalyzing of the hydrolysis of cellular chemical bonds.

Claim 8. The method for treating a patient suffering from a cancerous disease in accordance with claim 1 wherein:

the cytotoxicity of said antibodies or fragments thereof is mediated through producing an immune response against putative cancer antigens residing on tumor cells.

Claim 9. The method for treating a patient suffering from a cancerous disease in accordance with claim 1 wherein:

the cytotoxicity of said antibodies or fragments thereof is mediated through targeting of cell membrane proteins to interfere with their function.

Claim 10. The method for treating a patient suffering from a cancerous disease in accordance with claim 1 wherein:

the cytotoxicity of said antibodies or fragments thereof is mediated through production of a conformational change in a cellular protein effective to produce a signal to initiate cell-killing.

Claim 11. The method for treating a patient suffering from a cancerous disease in accordance with claim 1 wherein:

said method of production utilizes a tissue sample containing cancerous and non-cancerous cells obtained from a particular individual.

Claim 12. A method for treating a patient suffering from a cancerous disease comprising:

administering to said patient anti-cancer antibodies or fragments thereof produced in accordance with a method for the production of individually customized anti-cancer antibodies which are useful in treating a cancerous disease, said antibodies including a subset of antibodies or fragments thereof characterized as being cytotoxic against cells of a

cancerous tissue, said subset being essentially benign to non-cancerous cells;

wherein one or more antibodies or fragments thereof selected from said subset are placed in admixture with a pharmaceutically acceptable adjuvant and are administered in an amount effective to mediate treatment of said cancerous disease;

said one or more antibodies or fragments thereof produced by a hybridoma cell line having an ATCC Accession Number selected from the group consisting of ( ) or combinations thereof.

Claim 13. The method for treating a patient suffering from a cancerous disease in accordance with claim 12, wherein said one or more antibodies or fragments thereof selected from said subset are humanized.

Claim 14. The method for treating a patient suffering from a cancerous disease in accordance with claim 12 comprising:

conjugating said subset of antibodies or fragments thereof with a member selected from the group consisting of toxins, enzymes, radioactive compounds, and hematogenous cells; and

administering conjugated antibodies or fragments thereof to said patient;

wherein said conjugated antibodies are placed in admixture with a pharmaceutically acceptable adjuvant and are administered in an amount effective to mediate treatment of said cancerous disease.

Claim 15. The method of claim 14, wherein said one or more antibodies or fragments thereof selected from said subset are humanized.

Claim 16. The method for treating a patient suffering from a cancerous disease in accordance with claim 12 wherein:

the cytotoxicity of said antibodies or fragments thereof is mediated through antibody dependent cellular toxicity.

Claim 17. The method for treating a patient suffering from a cancerous disease in accordance with claim 12 wherein:

the cytotoxicity of said antibodies or fragments thereof is mediated through complement dependent cellular toxicity.

Claim 18. The method for treating a patient suffering from a cancerous disease in accordance with claim 12 wherein:

the cytotoxicity of said antibodies or fragments thereof is mediated through catalyzing of the hydrolysis of cellular chemical bonds.

Claim 19. The method for treating a patient suffering from a cancerous disease in accordance with claim 12 wherein:

the cytotoxicity of said antibodies or fragments thereof is mediated through producing an immune response against putative cancer antigens residing on tumor cells.

Claim 20. The method for treating a patient suffering from a cancerous disease in accordance with claim 12 wherein:

the cytotoxicity of said antibodies or fragments thereof is mediated through targeting of cell membrane proteins to interfere with their function.

Claim 21. The method for treating a patient suffering from a cancerous disease in accordance with claim 12 wherein:

the cytotoxicity of said antibodies or fragments thereof is mediated through production of a conformational change in a cellular protein effective to produce a signal to initiate cell-killing.

Claim 22. The method for treating a patient suffering from a cancerous disease in accordance with claim 12 wherein:

said method of production utilizes a tissue sample containing cancerous and non-cancerous cells obtained from a particular individual.

Claim 23. Anti-cancer antibodies or fragments thereof selected from the group consisting of a 1LN-8, 4BD-1, a 4BD-3, a 4BD-6, a 4BD-9, a 4BD-13, a 4BD-18, a 4BD-20, a 4BD-25, a 4BD-26, a 4BD-27, a 4BD-28, a 4BD-32, a 4BD-37, a 4BD-50, a 6BD-1, a 6BD-3, a 6BD-5, a 6BD-11, a 6BD-25, a 7BD-7, a 7BD-12-1, a 7BD-12-2, a 7BD-13, a 7BD-14, a 7BD-19, a 7BD-21, a 7BD-24, a 7BD-29, a 7BD-30, a 7BD-31, a 7BDI-17, a 7BDI-58, a 7BDI-60, a 7BDI-62, a 5LAC2, a 5LAC4, a 5LAC20, a 5LAC23, a H460-1, a H460-4, a H460-5, a H460-10, a H460-14, a H460-16-1, a H460-16-2, a H460-23 and a H460-27 monoclonal antibody or combinations thereof.

Claim 24. Anti-cancer antibodies or fragments thereof produced by a hybridoma cell line having an ATCC Accession Number selected from the group consisting of ( ).

Claim 25. A binding assay to determine presence of cancerous cells in a tissue sample selected from a tumor originating in colon, prostate, ovarian, lung, breast, or skin tissue comprising:

providing a tissue sample from a tumor originating in colon, prostate, ovarian, lung, breast, or skin tissue;

providing an isolated monoclonal antibody or antigen binding fragment thereof encoded by the clone deposited with the ATCC as Accession Number PTA-2700;

contacting said isolated monoclonal antibody or antigen binding fragment thereof with said tissue sample; and

determining binding of said isolated monoclonal antibody or antigen binding fragment thereof with said tissue sample;

whereby the presence of said cancerous cells in said tissue sample is indicated.

Claim 26. A process of isolating or screening for cancerous cells in a tissue sample selected from a tumor originating in colon, prostate, ovarian, lung, breast, or skin tissue comprising:

providing a tissue sample from a tumor originating in colon, prostate, ovarian, lung, breast, or skin tissue;

providing an isolated monoclonal antibody or antigen binding fragment thereof encoded by the clone deposited with the ATCC as Accession Number PTA-2700;

contacting said isolated monoclonal antibody or antigen binding fragment thereof with said tissue sample; and

determining binding of said isolated monoclonal antibody or antigen binding fragment thereof with said tissue sample;

whereby said cancerous cells are isolated by said binding and their presence in said tissue sample is confirmed.